Chapter 5: Farmlands

5.1 Introduction

This section discusses general farmland trends and crops in western Salt Lake County and northwest Utah County, as well as specially classified farmland (prime, unique, and state or locally important farmland).

Farmland Impact Analysis Area. The general farmland impact analysis area includes the non-urban areas inside the Mountain View Corridor (MVC) study area (see Section 1.1, Study Area Description, in Chapter 1). In this chapter, the farmland impact analysis area is described from north to south and farmland resources are described by county. Note that, in all farmland-related figures, only the farmland within 0.5 mile of the proposed alternatives is shown.

The amount of farmland in Salt Lake and Utah Counties is rapidly diminishing because of urbanization and development. According to the U.S. Department of Agriculture (USDA) Census of Agriculture, there are currently a total of about 2,096,740 combined acres of total cropland in these counties, including 972,628 acres of harvested cropland and 1,100,900 acres of irrigated land (USDA 2002).

5.2 Regulatory Setting

5.2.1 Farmland Protection Policy Act

The Farmland Protection Policy Act of 1981 was intended to "minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses" (7 United States Code [U.S.C.] 4201(b)).

To achieve that goal, the Farmland Protection Policy Act (7 U.S.C. 4202(b)) directs federal agencies to

> identify the quantity of farmland actually converted by federal programs; to identify and take into account the adverse effects of federal programs on the preservation of farmland; consider alternative actions, as appropriate, that could lessen such adverse effects; and assure that such federal programs, to the extent practicable, are compatible with state, unit of local government, and private programs and policies to protect farmland.

As defined in the Farmland Protection Policy Act, "farmland" includes prime farmland, unique farmland, and farmland of state or local importance. Prime farmland is land that "has the best combination of physical and chemical characteristics for producing" agricultural crops. Unique farmland is land "other than prime farmland that is used for production of specific high-value food and fiber crops," as determined by the Secretary of Agriculture. Farmland of state or local importance is farmland, other than prime or unique farmland, that is of statewide or local importance for the production of agricultural crops. The term "farmland" does not include land already in or committed to urban development or water storage (7 U.S.C. 4201(c)(1)).

For actions that could affect farmland, the Farmland Protection Policy Act requires federal agencies to prepare a Farmland Conversion Impact Rating Form, which is known as Form NRCS-CPA-106. This form is shown in Appendix 5A, Farmland Rating Form and Correspondence.

The federal agency responsible for overseeing compliance with the Farmland Protection Policy Act is the Natural Resources Conservation Service (NRCS). NRCS has stopped making determinations on possible prime, unique, and statewide or local important farmland that is already committed to development within city limits. NRCS's position is that, when funds have already been committed for utilities, water lines, and road replacement and widening, the land is committed to development and can be exempt from a determination. Appendix 5A includes a copy of the NRCS guidance letter that suspends the requirement to make determinations on farmland that is already committed to development through local actions. Appendix 5A also includes a copy of a June 2005 e-mail

from the local Salt Lake City NRCS office stating that this guidance is still in effect.

5.2.2 Agriculture Protection Areas

Utah law also allows the formation of Agriculture Protection Areas (APAs), which are geographic areas where agricultural activities are given special protections.

In 1994, the Utah legislature enacted Utah Administrative Code Title 17 (Counties), Chapter 41 (Agriculture Protection Areas). This law protects certain agricultural areas in unincorporated areas. In 1998, a bill (House Bill 74) was passed that allowed APAs to be established within city boundaries as well. House Bill 74 requires counties in Utah to create an Agriculture Protection Area Advisory Board to evaluate proposals for APAs. Owners of land in agricultural production (crops, livestock, or livestock products) can petition their local municipality for an APA designation.

APAs are protected from state and local laws that would restrict farm practices, unless the regulations are required for public safety or are required by federal law. The county in which the APA is located may not change the zoning designation of the land within the APA unless all landowners give written approval for the change. APAs cannot be condemned for highway purposes unless (1) the landowner requests the removal of the designation, or (2) the applicable legislative body (that is, the legislative body of the county, city, or town in which the APA is located) and the advisory board approve the condemnation, provided that “there is no reasonable and prudent alternative to the use of the land within the agriculture protection area for the project” (Utah Administrative Code, Section 17-41-405(4)(a)). If protected agricultural areas remain in agricultural use, farm equipment access must be provided to allow landowners to move farm machinery between parcels.

A landowner can petition the County to have his or her land designated as an APA. The County then usually has 120 days to grant or deny the request. APA status is typically maintained even after the property is developed and is no longer in agricultural use, unless the property owner files a petition to remove the land from the APA. When this occurs, the rest of the APA maintains its status, and the boundaries of the APA are redefined. APAs are reviewed every 20 years to determine if the APA should be maintained, modified, or terminated.

5.3 Affected Environment

5.3.1 Resource Identification Methods

Information about farmlands was obtained using the following methods:

- Reviewing the online 1997 and 2002 USDA Census of Agriculture and the Utah State Water Plan published by the Utah Division of Water Resources
- Reviewing the Utah Division of Water Resources *Water-Related Land Use Data Inventory* map dated 2002, as well as reviewing city and county Web sites
- Meeting or corresponding with local officials, including representatives from NRCS, with jurisdiction over the farmland resource
- Reviewing public comments
- Reviewing city and county maps
- Conducting field reviews

All identified croplands; prime, unique, and state important farmlands; and APAs were added to a data layer in an electronic map file. Once the proposed alternatives were developed, the 0.5-mile buffer for each alternative was overlaid onto the farmlands data layer to identify and quantify the farmland resources that would be affected. Table 5.3-1 below describes the farmland resources in the impact analysis area.

Table 5.3-1. Description of Farmland Resources in the Impact Analysis Area

Farmland Resource	Characteristics and Requirements
Cropland	• Cropland generally is land under cultivation, but also includes pasture and fallow land. • Cropland can be irrigated or dryland (non-irrigated). • Cropland can be identified through a number of programs or methods. Cropland data are compiled by federal, state, and local governments.
Prime and unique farmland, state important farmland	• These are important farmlands as identified under the federal Farmland Protection Policy Act (see Section 5.2.1, Farmland Protection Policy Act). • The program is overseen by NRCS. • Federal actions that could affect prime and unique farmland must have a Farmland Protection Policy Act evaluation. The evaluation is initiated by preparing a Farmland Conversion Impact Rating Form. • State and local governments work together to identify farmland of state and local importance.
Agriculture Protection Areas (APAs)	• These areas are lands devoted to agricultural use and identified as APAs according to Utah's Farmland Assessment Act (see Section 5.2.2, Agriculture Protection Areas). • Counties record (enroll), assess, and evaluate lands protected under the Farmland Assessment Act. Taxes on APAs are assessed based on the enrolled lands' productive value. • APAs are protected from regulations that would restrict farm practices, unless the regulations are required for public safety or are required by federal law. • Landowners choose to enroll in and withdraw from the program.

5.3.2 Prime and Unique Farmland

Much of the farmlands in the impact analysis area are within city limits. Therefore, they are not considered under the Farmland Protection Policy Act (see Section 5.2.1, Farmland Protection Policy Act) and are not discussed in this chapter. However, this chapter does discuss any prime, unique, or statewide important farmland that is outside of city limits, such as in unincorporated parts of the counties.

Prime farmland is defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. The land must have the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed (including water management) according to acceptable farming methods (Utah Agricultural Experiment Station 1983).

Unique farmland is defined as land other than prime farmland used for the production of specific high-value food and fiber crops. Examples of such crops are citrus, tree nuts, olives, cranberries, and vegetables (Speth 1980).

Figure 5-7 through Figure 5-12, Prime, Unique, and State Important Farmland, show prime farmland adjacent to the proposed alternatives as designated by NRCS. Only prime farmland in the impact analysis area (that is, the area within 0.5 mile of the proposed alternatives) is shown in the figures. There is no unique farmland in the impact analysis area.

5.3.2.1 Salt Lake County

Table 5.3-2 below shows that the Salt Lake County portion of the impact analysis area contains about 513 acres of prime farmland. This table was developed through consultation with NRCS (Bell 2003). NRCS distinguishes between two types of prime farmland: “prime when irrigated” and “prime when irrigated and drained.” According to NRCS, both types of prime farmland are present in the impact analysis area. There is no unique farmland in the Salt Lake County portion of the impact analysis area.

Table 5.3-2. Prime, Unique, and State Important Farmland in the Farmland Impact Analysis Area

Farmland Designation	Acres
Salt Lake County	
Prime	513
Unique	0
State important	340
Total	**853**
Utah County	
Prime	2,627
Unique	0
State important	777
Total	**3,404**

Source: Bell 2003

5.3.2.2 Utah County

Based on consultation with NRCS (Bell 2003), and as shown above in Table 5.3-2, the Utah County portion of the impact analysis area contains 2,627 acres of prime farmland. This table was developed through consultation with NRCS (Bell 2003). NRCS distinguishes between two types of prime farmland: "prime when irrigated" and "prime when irrigated and drained." According to NRCS, both types of prime farmland are present in the impact analysis area. There is no unique farmland in the Utah County portion of the impact analysis area.

5.3.3 Farmland of State Importance

State important farmland is classified by NRCS as farmland of lesser quality than prime or unique farmland that has the soil, water supply, and other characteristics that, with good management, yield productive crops (Utah Agricultural Experiment Station 1983).

5.3.3.1 Salt Lake County

Based on consultation with NRCS (Bell 2003), and as shown above in Table 5.3-2, the Salt Lake County portion of the impact analysis area contains 340 acres of state important farmland. Figure 5-7 through Figure 5-9, Prime, Unique, and State Important Farmland, show state important farmland adjacent to the proposed alternatives in Salt Lake County as designated by NRCS. Only state

important farmland in the impact analysis area (that is, the area within 0.5 mile of the proposed alternatives) is shown in the figures.

5.3.3.2 Utah County

Based on consultation with NRCS (Bell 2003), and as shown above in Table 5.3-2, Prime, Unique, and State Important Farmland in the Farmland Impact Analysis Area, the Utah County portion of the impact analysis area contains 777 acres of state important farmland. Figure 5-10 through Figure 5-12, Prime, Unique, and State Important Farmland, show state important farmland adjacent to the proposed alternatives in Utah County as designated by NRCS. Only state important farmland in the impact analysis area (that is, the area within 0.5 mile of the proposed alternatives) is shown in the figures.

5.3.4 Farmland of Local Importance

Farmland of local importance is either currently producing crops or has the capability to produce row crops. Farmland of local importance is land other than prime farmland, farmland of statewide importance, or unique farmland. This land can be important to the local economy due to its productivity. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use (NRCS 2003).

The farmland impact analysis area is in a part of Salt Lake and Utah Counties that is undergoing considerable urban development. According to the 2002 Census of Agriculture (USDA 2002), the acreage of land in farms in Utah County decreased by 8% between 1997 and 2002 (from 374,086 acres in 1997 to 343,072 in 2002). There was an even larger decrease in Salt Lake County, where the acreage of land in farms decreased by 31% between 1997 and 2002 (from 118,657 acres in 1997 to 82,267 acres in 2002). Given these trends, many tracts of land that are currently in agricultural use or are currently zoned for agricultural use are planned to develop into residential subdivisions and are shown as such in city and county land-use plans.

Farmland in the impact analysis area is used for cultivation (cropland), livestock grazing, and dry pasture, although some land traditionally used for agriculture is fallow. For the most part, active agricultural production in the Salt Lake County portion of the impact analysis area focuses on non-irrigated crops (such as dry grain, beans, and seeds) and non-irrigated pasture land. Active agricultural production in the Utah County portion of the impact analysis area focuses on irrigated crops (mainly alfalfa) and irrigated pasture land. Crops are frequently rotated; therefore, while these data provide an accurate picture of irrigated cropland in the impact analysis area, they might not reflect the most current crop

pattern. A large portion of the dryland farmland currently remains idle (Utah Division of Water Resources 1999).

According to the 2002 Census of Agriculture (USDA 2002) the majority of farmland in the impact analysis area is within Utah County, and the top five commodities in Utah County are cattle and calves, nursery and greenhouse crops, milk and other dairy products, other animals and animal products including mink or their pelts, and other crops and hay. The top five farming commodities in Salt Lake County are nursery and greenhouse crops, cattle and calves, other animals and animal products including mink or their pelts, other crops and hay, and horses, ponies, mules, burros, and donkeys (USDA 2002).

5.3.4.1 Salt Lake County

Despite its status as one of Utah's most urbanized counties, there were 712 farms in Salt Lake County in 2003. The total amount of land in farms was 82,267 acres with an average farm size of 116 acres; however, the majority of farms in Salt Lake County are less than 10 acres. The market value of agricultural products produced in Salt Lake County and sold in 2002 was about $19 million. Crop sales accounted for 70% of this amount, and livestock sales accounted for 30% (USDA NASS 2003).

The Church of Jesus Christ of Latter-day Saints (LDS Church) owns several pivot-irrigated farms in Riverton near 13400 South that are identified as APAs. These farms are used to grow green peas and sweet corn for canning at the Murray Cannery. Wheat for storage is also grown at these farms. Farther north in the Salt Lake County portion of the impact analysis area, irrigated farmlands produce pasture barley, grass, corn, alfalfa, and other crops. However, non-irrigated crops, including dry grain, beans, and seed, as well as idle pasture are more prevalent than irrigated crops in the Salt Lake County portion of the impact analysis area.

Cropland or farmland in the Salt Lake County portion of the impact analysis area is shown in Table 5.3-3 below and in Figure 5-1 through Figure 5-3, Croplands. The table is based on the Utah Division of Water Resources *Water-Related Land Use Data Inventory* map dated 2003. Only cropland in the impact analysis area (that is, the area within 0.5 mile of the proposed alternatives) is shown in the figures.

Table 5.3-3. Cropland or Farmland in the Salt Lake County Farmland Impact Analysis Area

Crop or Farmland Type	Acres
Irrigated Crops or Farmland	
Alfalfa	957
Grain	426
Grass/turf	203
Other vegetables	29
Pasture	246
Sub-irrigated pasture	181
Idle	292
Fallow	7
Total irrigated	**2,341**
Non-irrigated Crops or Farmland	
Dry grain/beans/seeds	3,403
Dry idle	3,509
Dry pasture	2,195
Dry fallow	340
Total non-irrigated	**9,447**

Acres were calculated using the Salt Lake County portion of the MVC farmlands impact analysis area.

Source: Utah Division of Water Resources 2003

5.3.4.2 Utah County

There were 2,046 farms in Utah County in 2004. The average farm size was 768 acres. The market value of agricultural products produced in Utah County and sold in 2002 was $117 million. Crop sales accounted for 40% of this amount, and livestock sales accounted for 60% (USDA 2002). The major crops grown in Utah County include alfalfa and fruit crops (Utah Division of Water Resources 2000). The major crops grown in the Utah County portion of the impact analysis area are alfalfa and irrigated and dry grains. Unlike the Salt Lake County portion of the impact analysis area, the majority of cropland in the Utah County portion of the impact analysis area consists of irrigated crops and pasture.

The LDS Church also owns many farms in Utah County that are designated as APAs (see Section 5.2.2, Agriculture Protection Areas). Most of these farms are located near Redwood Road. The LDS Church grows the same types of crops in Utah County as in Salt Lake County.

Current farmland in the Utah County portion of the farmland impact analysis area is shown in Table 5.3-4 and in Figure 5-4 through Figure 5-6, Croplands. The table is based on the Utah Division of Water Resources *Water-Related Land Use Data Inventory* map dated 2003. Only cropland in the impact analysis area (that is, the area within 0.5 mile of the proposed alternatives) is shown in the figures.

Table 5.3-4. Cropland or Farmland in the Utah County Farmland Impact Analysis Area

Crop or Farmland Type	Acres
Irrigated Crops or Farmland	
Alfalfa	2,120
Corn	582
Grain	970
Grass hay	396
Fallow	769
Other vegetables	15
Pasture	1,461
Sub-irrigated pasture	417
Idle	716
Total irrigated	**7,446**
Non-irrigated Crops or Farmland	
Dry grain/beans/seeds	629
Dry idle	66
Dry pasture	2
Total non-irrigated	**697**

Acres were calculated using the Utah County portion of the MVC farmlands impact analysis area.
Source: Utah Division of Water Resources 2003

5.3.5 Agriculture Protection Areas

Within the MVC study area, several areas have been designated as APAs. These are mostly farming areas that have received special zoning protection from the local jurisdictions to preserve the area as open space related to agriculture. These APAs are mostly used to raise crops and livestock and are shown in Figure 5-13 through Figure 5-15, Agriculture Protection Areas.

5.3.5.1 Salt Lake County

There are no APAs in the Salt Lake County portion of the farmland impact analysis area.

5.3.5.2 Utah County

There are 10 APAs in the Utah County portion of the MVC study area. About 1,146 acres of these 10 APAs are within the farmland impact analysis area (that is, the area within 0.5 mile of the proposed alternatives). Each of these 10 APAs consists of one or more separate parcels, and each parcel within the APA can be owned by a different individual or entity. However, each APA has a single name according to the Utah County records (see Figure 5-13 through Figure 5-15, Agriculture Protection Areas, and Table 5.3-5).

Additionally, Utah County is one of two leading mink-producing counties in Utah (Utah Department of Agriculture 2000). Within the Utah County portion of the impact analysis area, there is one mink ranch in Lehi that has been designated as an APA.

Table 5.3-5. Agriculture Protection Areas in the Utah County Farmland Impact Analysis Area

Agriculture Protection Area by Name[a]	Acreage within Impact Analysis Area[b]
Allred	66
Fenn	223
KB&M Beckstead	24
LDS 1	422
LDS 2	1
LDS 3	181
LDS 4	26
LDS 5	4
Utah County	3.5
Williams	195
Total	**1,145.5**

[a] APAs can consist of several separate parcels owned by different individuals or entities.

[b] Acreage shown includes only APA parcel acreage within the half-mile impact analysis area. The entire acreage of the APA could be more than the acreage shown in the table.

Source: Utah County 2007

5.4 Environmental Consequences

5.4.1 Methodology

This section addresses the impacts of the proposed alternatives on farmland, including cropland and farmland designated as prime, unique, or state important. Farmland impacts were evaluated based on information from several sources including information from Utah Division of Water Resources water inventory mapping, the NRCS soil surveys of Salt Lake and Utah Counties, field surveys along the proposed alternatives, reviews of project aerial maps, and parcel information (zoning classifications and acreage) obtained from the assessor's offices of Salt Lake and Utah Counties.

5.4.1.1 Farmland Conversion Impact Rating

The analysis of impacts was coordinated with NRCS to comply with the Farmland Protection Policy Act. This Act requires that each corridor under study be evaluated to determine impacts from the proposed project and the resulting conversion of identified prime, unique, or state important farmland. A Farmland Protection Policy Act impact rating was determined for each alternative using the NRCS Farmland Conversion Impact Rating for Corridor-Type Projects, which was documented on Form NRCS-CPA-106 (see Appendix 5A, Farmland Rating Form and Correspondence). The main criteria used for this rating are total farmland acreage to be converted (both directly and indirectly), percentage of total acreage in the county or city, degree of non-urban land use, level of on-farm investments, availability of state or local programs to protect farmland, the size of affected farms compared to the average, and amount of non-farmable land that is created.

If the corridor receives a total rating of less than 160 points, no further consideration for protection is given and no additional sites need to be evaluated. If the corridor receives a total rating of 160 points or more, it receives higher levels of consideration for protection.

For the MVC project, an NRCS-CPA-106 form was completed for each alternative in both counties, as well as the combination of Salt Lake County and Utah County alternatives that would directly and indirectly affect the most prime and state important farmland under the assumption that this combination would have the highest impact rating. The combination of alternatives with the highest amount of farmland impacts would be the 7200 West Freeway Alternative in Salt Lake County combined with the Southern Freeway Alternative in Utah County (see Chapter 2, Alternatives).

The total rating for the combined alternatives (the 7200 West Freeway and Southern Freeway Alternatives) was 160 points. The combined rating for these two alternatives was lower than the sum of the ratings for the individual alternatives (151 points and 155 points, respectively) because some impacts were common to both alternatives. Since the combined rating for these two alternatives was just at the 160-point threshold, NRCS, as an administrator of the USDA Farmland Protection Policy Act, recommends that the Federal Highway Administration (FHWA) consider the following issues as described under 7 Code of Federal Regulations (CFR) 658.4 and 658.5:

- Use of the land that is not farmland or use of existing structures
- Alternate sites, locations, and designs that would serve the proposed purpose but would convert fewer acres of farmland or other farmland that has a lower relative value
- Special siting requirements of the proposed project and the extent to which an alternate site fails to satisfy the special siting requirements as well as the originally selected site

5.4.1.2 Indirect Impacts

Indirect impacts to farmland often occur when farmland is taken out of production because the remaining parcels would be too small to farm or because access to parcels would be eliminated. Indirect impacts from the proposed alternatives were determined by first identifying parcels that are being farmed. This identification was made by reviewing 2004 National Agricultural Imagery Program aerial photographs, reviewing city land use records (2004), and reviewing county parcel data that showed the type of use for each parcel. Next, the degree to which each farmed parcel would be affected by the alternatives was noted. Farmed parcels could be affected as a strip take (a strip of farmland at the edge of the parcel would need to be acquired), a split take (the parcel would be split by an alternative), or a total take (the entire parcel would need to be acquired).

In addition, any remaining parcels that would be less than 5 acres were noted. The Utah Department of Transportation (UDOT) and the landowner would determine the viability of each affected farming operation on a case-by-case basis. However, for the purpose of determining indirect impacts, parcels with less than 5 acres remaining were considered non-farmable and were considered to be indirectly affected. Lastly, the type of access for each affected parcel was noted. This access was described as acceptable, cut off, or adjacent property (meaning that access would be available through the adjacent property).

5.4.2 No-Action Alternative

Under the No-Action Alternative, the MVC project would not be constructed, so no impacts to farmland would occur as a result of the MVC project. Other transportation projects identified in the Wasatch Front Regional Council and Mountainland Association of Governments long-range plans and by the local communities would be constructed, and these projects could cause impacts to farmland.

In addition, rapid development in both counties is quickly turning farmland into residential, commercial, and industrial uses (Utah Division of Water Resources 2003). As shown in Table 5.4-1, between 1995 and 2002, over 42,000 acres of agricultural land were lost in Utah County, while about 19,000 acres of agricultural land were lost in Salt Lake County over that same period. These trends would likely continue under the No-Action Alternative.

Table 5.4-1. Farmland Conversion

		Acres	
County	**Land Use Type**	**1995**	**2002**
Utah County	Agriculture	211,259	168,376
	Residential	38,301	51,955
	Commercial/industrial	9,855	25,004
	Other	179,438	139,868
Salt Lake County	Agriculture	46,968	28,099
	Residential	75,978	99,366
	Commercial/industrial	30,617	72,674
	Other	72,619	53,371

Source: Utah Division of Water Resources 1999

5.4.3 Salt Lake County Alternatives

In Salt Lake County, two roadway alternatives and a transit alternative which would be implemented as part of the roadway alternatives are under consideration: the 5600 West Transit Alternative, the 5800 West Freeway Alternative, and the 7200 West Freeway Alternative. Under the 5600 West Transit Alternative, there is a dedicated right-of-way option and a mixed-traffic option. In addition, a tolling option was considered for each freeway alternative. Impacts under each combination of alternatives and options are discussed in the following sections. A summary table of all impacts is presented at the end of this chapter.

5.4.3.1 5600 West Transit Alternative

As described in Chapter 2, Alternatives, two transit options are under consideration along 5600 West in Salt Lake County. One option, the Dedicated Right-of-Way Option, would incorporate a transit system running down the center of the roadway, and the other, the Mixed-Traffic Option, would incorporate a transit system running alongside the roadway.

5600 West Transit Alternative Impacts

Farmland Resource	Dedicated Right-of-Way Option	Mixed-Traffic Option
Irrigated cropland (acres)	7.5	5.5
Non-irrigated cropland (acres)	98	100
Prime/unique farmland (acres)	0	0
State important farmland (acres)	0	0
Agriculture Protection Areas	0	0

Neither transit option would affect any prime, unique, or state important farmland outside of city limits (see Section 5.2.1, Farmland Protection Policy Act). Since this alternative would not affect any prime, unique, or state important farmland, the NRCS-CPA-106 rating form was not completed for this alternative.

In addition, neither transit option would affect APAs. Both options would affect some irrigated and non-irrigated croplands as discussed below.

5600 West Transit Alternative with Dedicated Right-of-Way Transit Option

The Dedicated Right-of-Way Transit Option would require the acquisition of additional right-of-way at stations and park-and-ride lots and along segments of the proposed transit line that are not within the existing 5600 West roadway. As a result of this acquisition, about 7.5 acres of irrigated cropland and about 98 acres of non-irrigated cropland would be converted to roadway use. Table 5.4-2 below shows the impacts to crops and farmland in the Salt Lake County portion of the impact analysis area from the Dedicated Right-of-Way Transit Option. This option would not have any indirect impacts on farmland.

Table 5.4-2. Impacts to Crops and Farmland from the 5600 West Transit Alternative

Crop or Farmland Type	Dedicated Right-of-Way Option (acres)	Mixed-Traffic Option (acres)
Irrigated Crops or Farmland		
Alfalfa	5	5
Pasture	0.5	0.5
Sub-irrigated pasture	2	0
Total irrigated	**7.5**	**5.5**
Non-irrigated Crops or Farmland		
Dry fallow	6	6
Dry grain/beans/seeds	42	47
Dry idle	33	32
Dry pasture	16	14
Idle	0.75	0.6
Total non-irrigated	**98**	**100**

Acres were calculated using the MVC study area for Salt Lake County (see Figure 1-1, Mountain View Corridor Study Area Map).

5600 West Transit Alternative with Mixed-Traffic Transit Option

Though their right-of-way requirements vary, the Dedicated Right-of-Way Transit Option and the Mixed-Traffic Transit Option have identical alignments. For this reason, both options would have similar impacts to farmland. As a result of right-of-way acquisition, about 5.5 acres of irrigated cropland and about 100 acres of non-irrigated cropland would be converted to roadway use. Table 5.4-2 above, Impacts to Crops and Farmland from the 5600 West Transit Alternative, shows the impacts to crops and farmland in the Salt Lake County portion of the impact analysis area from the Mixed-Traffic Transit Option. This option would not have any indirect impacts on farmland.

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5.4.3.2 5800 West Freeway Alternative

As described in Chapter 2, Alternatives, this alternative would consist of a freeway extending from Interstate 80 (I-80) to the Utah County line. This alternative would not affect any APAs.

5800 West Freeway Alternative Impacts	
Farmland Resource	**Impacts**
Irrigated cropland (acres)	107
Non-irrigated cropland (acres)	766
Prime/unique farmland (acres)	22
State important farmland (acres)	0
Agriculture Protection Areas	0
Indirect impacts (acres)	3

The 5800 West Freeway Alternative would affect about 107 acres of irrigated cropland and about 766 acres of non-irrigated cropland. Table 5.4-3 shows the impacts to crops and farmland in the Salt Lake County portion of the impact analysis area from the 5800 West Freeway Alternative.

Table 5.4-3. Impacts to Crops and Farmland from the 5800 West Freeway Alternative

Crop or Farmland Type	Acres
Irrigated Crops or Farmland	
Alfalfa	44
Grain	26
Pasture	26
Sub-irrigated pasture	11
Total irrigated	**107**
Non-irrigated Crops or Farmland	
Dry fallow	30
Dry grain/beans/seeds	341
Dry idle	284
Dry pasture	91
Idle	20
Total non-irrigated	**766**

Acres were calculated using the MVC study area for Salt Lake County (see Figure 1-1, Mountain View Corridor Study Area Map).

The 5800 West Freeway Alternative would affect about 22 acres of prime farmland. No state important farmland would be affected by this alternative. Using the NRCS-CPA-106 rating form, the 5800 West Freeway Alternative is rated 143 points (see Appendix 5A, Farmland Rating Form and Correspondence),

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which is under the 160-point threshold where special mitigation measures and alternatives must be considered.

Three parcels would require strip takes such that the remaining parcel would have less than 5 acres of remaining farmland. UDOT and the landowner would determine the viability of each affected farming operation on a case-by-case basis. The total farmland acreage lost due to these indirect impacts would be about 3 acres.

Combined Impacts of 5800 West Freeway and 5600 West Transit Alternatives

The 5800 West Freeway Alternative would be implemented with one of the two 5600 West Transit Alternative options. The combination of the freeway alternative with each of the transit options would cause different impacts to croplands, but the impacts to prime, unique, and state important farmlands and APAs would be the same as those from the 5800 West Freeway Alternative.

Combined Impacts of 5800 West Freeway and 5600 West Transit Alternatives

Farmland Resource	Dedicated Right-of-Way Option	Mixed-Traffic Option
Irrigated cropland (acres)	116	112
Non-irrigated cropland (acres)	848	866
Prime/unique farmland (acres)	22	22
State important farmland (acres)	0	0
Agriculture Protection Areas	0	0
Indirect impacts (acres)	3	3

5800 West Freeway Alternative with Dedicated Right-of-Way Transit Option

This combination of freeway alternative and transit option would affect about 116 acres of irrigated cropland and about 848 acres of non-irrigated cropland. Impacts to specific crops and farmland are shown in Table 5.4-4 below.

5800 West Freeway Alternative with Mixed-Traffic Transit Option

This combination of freeway alternative and transit option would affect about 112 acres of irrigated cropland and about 866 acres of non-irrigated cropland. Impacts to specific crops and farmland are shown in Table 5.4-4 below.

Table 5.4-4. Impacts to Crops and Farmland from the Combined 5800 West Freeway and 5600 West Transit Alternatives

Crop or Farmland Type	Dedicated Right-of-Way Option (acres)	Mixed-Transit Option (acres)
Irrigated Crops or Farmland		
Alfalfa	49	49
Grain	26	26
Pasture	27	26
Sub-irrigated pasture	14	11
Total irrigated	**116**	**112**
Non-irrigated Crops or Farmland		
Dry fallow	36	36
Dry grain/beans/seeds	383	388
Dry idle	317	316
Dry pasture	91	105
Idle	21	21
Total non-irrigated	**848**	**866**

Acres were calculated using the MVC study area for Salt Lake County (see Figure 1-1, Mountain View Corridor Study Area Map).

5800 West Freeway Alternative with Tolling Option

Under the 5800 West Freeway Tolling Option, the overall facility design would not change compared to the non-tolled alternative, so impacts to farmlands would be the same as those from the 5800 West Freeway Alternative.

5.4.3.3 7200 West Freeway Alternative

As described in Chapter 2, Alternatives, this alternative would consist of a freeway extending from I-80 to the Utah County line. This alternative would not affect any APAs.

7200 West Freeway Alternative Impacts	
Farmland Resource	**Impacts**
Irrigated cropland (acres)	71.5
Non-irrigated cropland (acres)	515
Prime/unique farmland (acres)	30
State important farmland (acres)	34
Agriculture Protection Areas	0
Indirect impacts (acres)	11

The 7200 West Freeway Alternative would affect about 71.5 acres of irrigated cropland and about 515 acres of non-irrigated cropland. Table 5.4-5 shows the impacts to crops and farmland in the Salt Lake County portion of the impact analysis area from the 7200 West Freeway Alternative.

Table 5.4-5. Impacts to Crops and Farmland from the 7200 West Freeway Alternative

Crop or Farmland Type	Acres
Irrigated Crops or Farmland	
Alfalfa	45
Grain	26
Pasture	0.5
Total irrigated	**71.5**
Non-irrigated Crops or Farmland	
Dry fallow	30
Dry grain/beans/seeds	341
Dry idle	101
Dry pasture	36
Idle	7
Total non-irrigated	**515**

Acres were calculated using the MVC study area for Salt Lake County (see Figure 1-1, Mountain View Corridor Study Area Map).

The 7200 West Freeway Alternative would affect about 30 acres of prime farmland and about 34 acres of state important farmland. Using the NRCS-CPA-106 rating form, the 7200 West Freeway Alternative is rated 151 points (see Appendix 5A, Farmland Rating Form and Correspondence), which is under the 160-point threshold where special mitigation measures and alternatives must be considered.

Four parcels would require strip takes or would be split by the alternative in such a way that one of the remaining parcels would be smaller than 5 acres. UDOT and the landowner would determine the viability of each affected farming operation on a case-by-case basis. The total farmland acreage lost due to these indirect impacts would be about 11 acres.

Combined Impacts of 7200 West Freeway and 5600 West Transit Alternatives

As with the 5800 West Freeway Alternative, the 7200 West Freeway Alternative would be implemented with one of the two 5600 West Transit Alternative options.

Combined Impacts of 7200 West Freeway and 5600 West Transit Alternatives

Farmland Resource	Dedicated Right-of-Way Option	Mixed-Traffic Option
Irrigated cropland (acres)	79	77
Non-irrigated cropland (acres)	613	615
Prime/unique farmland (acres)	30	30
State important farmland (acres)	34	34
Agriculture Protection Areas	0	0
Indirect impacts (acres)	11	11

The combination of the freeway alternative with each of the transit options would cause different impacts to croplands, but the impacts to prime, unique, and state important farmlands and APAs would be the same as those from the 7200 West Freeway Alternative.

7200 West Freeway Alternative with Dedicated Right-of-Way Transit Option

This combination of alternative and transit option would affect about 79 acres of irrigated cropland and about 613 acres of non-irrigated cropland. Impacts to specific crops and farmland are shown in Table 5.4-6 below.

7200 West Freeway Alternative with Mixed-Traffic Transit Option

This combination of alternative and transit option would affect about 77 acres of irrigated cropland and about 615 acres of non-irrigated cropland. Impacts to specific crops and farmland are shown in Table 5.4-6 below.

Table 5.4-6. Impacts to Crops and Farmland from the Combined 7200 West Freeway and 5600 West Transit Alternatives

Crop or Farmland Type	Dedicated Right-of-Way Option (acres)	Mixed-Transit Option (acres)
Irrigated Crops or Farmland		
Alfalfa	50	50
Grain	26	26
Pasture	1	1
Sub-irrigated pasture	2	0
Total irrigated	**79**	**77**
Non-irrigated Crops or Farmland		
Dry fallow	36	36
Dry grain/beans/seeds	383	388
Dry idle	134	133
Dry pasture	52	50
Idle	8	8
Total non-irrigated	**613**	**615**

Acres were calculated using the MVC study area for Salt Lake County (see Figure 1-1, Mountain View Corridor Study Area Map).

7200 West Freeway Alternative with Tolling Option

Under the 7200 West Freeway Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative, so impacts to farmlands would be the same as those from the 7200 West Freeway Alternative.

5.4.4 Utah County Alternatives

In Utah County, three alternatives are under consideration: the Southern Freeway Alternative, the 2100 North Freeway Alternative, and the Arterials Alternative. In addition, a tolling option was evaluated for each Utah County alternative. Impacts under each combination of alternatives and options are discussed in the following sections.

5.4.4.1 Southern Freeway Alternative

As described in Chapter 2, Alternatives, this alternative would consist of a freeway extending from the Utah County line to Interstate 15 (I-15) at Lindon.

This alternative would directly affect six APAs.

Southern Freeway Alternative Impacts	
Farmland Resource	**Impacts**
Irrigated cropland (acres)	330
Non-irrigated cropland (acres)	125.5
Prime/unique farmland (acres)	149
State important farmland (acres)	49
Agriculture Protection Areas	6
Indirect impacts (acres)	43

One of the APAs that would be affected is a mink ranch in unincorporated Utah County southeast of Lehi and south of American Fork at about 7000 North 7000 West. This alternative would directly affect about 9 acres of the mink ranch.

This alternative would directly affect about 77 acres of APA-protected farmland. Three of the APAs that would be affected by this alternative are owned by the LDS Church. In a letter dated October 17, 2005, the Manager of Strategic Planning for the LDS Church said that the church would "expect that in the years to come our property will need to be considered as part of the solution for the expected growth in the area" (see Appendix 5A, Farmland Rating Form and Correspondence). Therefore, it is possible that the LDS Church might consider removing the APA status of these parcels.

The other three APAs that would be affected by this alternative are privately owned and have been protected under APA status since the late 1990s (one each in 1997, 1998, and 1999). According to Utah Administrative Code Section 17-41-405, Eminent Domain Restrictions, "If the condemnation is for highway purposes or for the disposal of solid or liquid waste materials, the applicable legislative body and the advisory board may approve the condemnation only if there is no reasonable and prudent alternative to the use of the land within the agriculture protection area for the project." Of the three alternatives in Utah County, the Southern Freeway Alternative would directly affect the most APAs.

Prime, Unique, and State Important Farmland

This alternative would affect about 149 acres of prime farmland and about 49 acres of state important farmland. Using the NRCS-CPA-106 rating form, the Southern Freeway Alternative is rated 155 points (see Appendix 5A, Farmland Rating Form and Correspondence), which is below the 160-point threshold where special mitigation measures and alternatives must be considered. Using the NRCS-CPA-106 rating form, this alternative was also evaluated in conjunction with the 7200 West Freeway Alternative, since this combination of alternatives would have the highest amount of impacts to prime and state important farmland. The combination of alternatives was rated 160 points (see Appendix 5A, Farmland Rating Form and Correspondence), which is just at the threshold where the special mitigation measures and alternatives described in Section 5.4.1.1, Farmland Conversion Impact Rating, are recommended.

All Farmland

This alternative would affect about 330 acres of irrigated farmland and about 125.5 acres of non-irrigated farmland. Table 5.4-7 shows the impacts to crops and farmland in the Utah County portion of the impact analysis area from the Southern Freeway Alternative.

Table 5.4-7. Impacts to Crops and Farmland from the Southern Freeway Alternative

Crop or Farmland Type	Impacts (acres)
Irrigated Crops or Farmland	
Alfalfa	131
Grain	47
Corn	42
Grass/hay	17
Pasture	71
Sub-irrigated pasture	22
Total irrigated	**330**
Non-irrigated Crops or Farmland	
Dry grain/beans/seeds	13.5
Dry idle	2
Idle	15
Fallow	95
Total non-irrigated	**125.5**

Acres were calculated using the MVC study area for Utah County (see Figure 1-1, Mountain View Corridor Study Area Map).

Fifty parcels would lose access, require strip takes, or be split by the alignment in such a way that one of the remaining parcels would be smaller than 5 acres. UDOT and the landowner would determine the viability of each farming operation on a case-by-case basis. The total farmland acreage potentially lost due to these indirect impacts is about 43 acres. Access would be cut off for two parcels, and 27 of the split parcels would be accessible only from an adjacent property.

Southern Freeway Alternative with Tolling Option

Under the Southern Freeway Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative, so impacts to farmlands would be the same as those from the Southern Freeway Alternative.

5.4.4.2 2100 North Freeway Alternative

As described in Chapter 2, Alternatives, this alternative would consist of a freeway extending from the Utah County line to State Route (SR) 73 in Saratoga Springs and a lateral freeway extending east along 2100 North to I-15 in Lehi.

This alternative would not affect any APAs.

2100 North Freeway Alternative Impacts

Farmland Resource	Impacts
Irrigated cropland (acres)	126.5
Non-irrigated cropland (acres)	174
Prime/unique farmland (acres)	97
State important farmland (acres)	20
Agriculture Protection Areas	0
Indirect impacts (acres)	20

Prime, Unique, and State Important Farmland

This alternative would affect about 97 acres of prime farmland and about 20 acres of state important farmland. Using the NRCS-CPA-106 rating form, the 2100 North Freeway Alternative is rated 148 points (see Appendix 5A, Farmland Rating Form and Correspondence), which is below the 160-point threshold where special mitigation measures and alternatives must be considered.

All Farmland

This alternative would affect about 126.5 acres of irrigated farmland and about 174 acres of non-irrigated farmland. Table 5.4-8 below shows the impacts to crops and farmland in the Utah County portion of the impact analysis area from the 2100 North Freeway Alternative.

Table 5.4-8. Impacts to Crops and Farmland from the 2100 North Freeway Alternative

Crop or Farmland Type	Impacts (acres)
Irrigated Crops or Farmland	
Alfalfa	51
Grain	10
Corn	0.5
Grass/hay	10
Grass/turf	0.0
Pasture	55
Sub-irrigated pasture	0.0
Total irrigated	**126.5**
Non-irrigated Crops or Farmland	
Dry grain/beans/seeds	23
Dry idle	8
Idle	32
Fallow	111
Total non-irrigated	**174**

Acres were calculated using the MVC study area for Utah County (see Figure 1-1, Mountain View Corridor Study Area Map).

Twenty-seven parcels would lose access, require strip takes, or be split by the alignment in such a way that one of the remaining parcels would be smaller than 5 acres. UDOT and the landowner would determine the viability of each farming operation on a case-by-case basis. The total farmland acreage potentially lost due to these indirect impacts is about 20 acres. Access would be cut off for three parcels, and 18 of the split parcels would be accessible only from an adjacent property.

2100 North Freeway Alternative with Tolling Option

Under the 2100 North Freeway Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative, so impacts to farmlands would be the same as those from the 2100 North Freeway Alternative.

5.4.4.3 Arterials Alternative

As described in Chapter 2, Alternatives, this alternative would consist of a series of arterial roadways throughout northern Utah County. The combination of arterials includes a freeway segment from the Utah County line to SR 73 and arterial roadways at Porter Rockwell Boulevard, 2100 North, and 1900 South.

Arterials Alternative Impacts

Farmland Resource	Impacts
Irrigated cropland (acres)	219.5
Non-irrigated cropland (acres)	148
Prime/unique farmland (acres)	125
State important farmland (acres)	49
Agriculture Protection Areas	4
Indirect impacts (acres)	64

This alternative would affect four APAs. One of the APAs that would be affected is the mink ranch described in Section 5.4.4.1, Southern Freeway Alternative. About 6 acres of the mink ranch would be directly affected by this alternative. The Arterials Alternative would directly affect about 23 acres of APA-protected farmland. The four APAs that would be affected include the three privately owned APAs described in Section 5.4.4.1 and one APA owned by the LDS Church. As noted in Section 5.4.4.1, the LDS Church might consider removing the APA status of this parcel.

Prime, Unique, and State Important Farmland

This alternative would affect about 125 acres of prime farmland and about 49 acres of state important farmland. Using the NRCS-CPA-106 rating form, the Arterials Alternative is rated 150 points (see Appendix 5A, Farmland Rating Form and Correspondence), which is under the 160-point threshold where special mitigation measures and alternatives must be considered.

All Farmland

This alternative would affect about 219.5 acres of irrigated cropland and about 148 acres of non-irrigated cropland. Table 5.4-9 below shows the impacts to crops and farmland in the Utah County portion of the impact analysis area from the Arterials Alternative.

Table 5.4-9. Impacts to Crops and Farmland from the Arterials Alternative

Crop or Farmland Type	Impacts (acres)
Irrigated Crops or Farmland	
Alfalfa	72
Grain	27
Corn	12
Grass/hay	11.5
Grass/turf	1
Pasture	82
Sub-irrigated pasture	14
Total irrigated	**219.5**
Non-irrigated Crops or Farmland	
Dry grain/beans/seeds	10
Dry idle	7
Idle	30
Fallow	101
Total non-irrigated	**148**

Acres were calculated using the MVC study area for Utah County (see Figure 1-1, Mountain View Corridor Study Area Map).

Eighty-five parcels would lose access, require strip takes, or be split by the alignment in such a way that one of the remaining parcels would be smaller than 5 acres. UDOT and the landowner would determine the viability of each farming operation on a case-by-case basis. The total farmland acreage potentially lost due to these indirect impacts is about 64 acres. Access would be cut off for eight parcels, and 22 of the split parcels would be accessible only from an adjacent property.

Arterials Alternative with Tolling Option

Under the Arterials Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative, so impacts to farmlands would be the same as those from the Arterials Alternative.

5.4.5 Mitigation Measures

Owners of farmland and farm-related businesses within the Mountain View Corridor right-of-way will be compensated according to the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and other state and federal guidelines if the owners' properties

are affected by project construction. For indirect impacts, UDOT, in coordination with the property owner, would determine, based on cost comparison, whether to restore access to the parcel or purchase the remainder of the farmland.

Any topsoil removed from areas of prime farmland and farmland of statewide importance will be scraped and stockpiled rather than covered over. The salvaged topsoil will be reapplied to disturbed slopes, seeded, and mulched or otherwise stabilized.

5.4.6 Cumulative Impacts

As part of the MVC Environmental Impact Statement (EIS) process, scoping meetings were held with the public and resource agencies to help identify issues to be analyzed in the EIS. The comments received during the public and agency scoping period were reviewed to determine if any significant issues were identified. The public identified the loss of farmlands as a main concern. Chapter 25, Cumulative Impacts, provides a detailed analysis of the potential cumulative impacts to farmlands. This section provides a summary of that analysis.

All of the proposed alternatives would result in a direct loss of about 1,500 acres or less of agricultural land (less than 1% of the total agricultural land currently in Salt Lake and Utah Counties). Other planned transportation projects noted in Chapter 25, Cumulative Impacts, would result in an additional loss of less than 700 acres of agricultural land. However, the main cause of the loss of farmland will continue to be urban growth that will occur between 2002 and 2030 in the two counties. This growth and development will occur with or without the MVC project, but the project could increase the pace of development in certain areas.

No data are available on the exact amount of agricultural land that will be converted to urban uses in the two counties, but, as described in Chapter 25, Cumulative Impacts, regional development will convert more than 50% of current agricultural land, or about 100,000 acres. Overall, due to the planned conversion of existing agricultural land to residential or commercial uses in the next 30 years, the cumulative impact on agricultural land is expected to be a nearly 50% loss of agricultural land. Overall, the MVC project would contribute to about 1.5% of the total loss in farmlands.

5.4.7 Summary of Impacts

Table 5.4-10 below summarizes the impacts from each combination of alternatives and options in Salt Lake County and Utah County.

Table 5.4-10. Summary of Impacts to Farmlands

Alternative[a]	Irrigated Cropland (acres)	Non-irrigated Cropland (acres)	Prime Farmland (acres)	Farmland of State Importance (acres)	Agriculture Protection Areas	Indirect Impacts (acres)
5800 West Freeway / 5600 West Transit / Southern Freeway						
Dedicated Transit	444.5	989.5	171	49	6	46
Mixed Transit	442.5	991.5	171	49	6	46
5800 West Freeway / 5600 West Transit / 2100 North Freeway						
Dedicated Transit	241	1,038	119	20	0	23
Mixed Transit	239	1,040	119	20	0	23
5800 West Freeway / 5600 West Transit / Arterials						
Dedicated Transit	334	1,012	147	49	4	67
Mixed Transit	332	1,014	147	49	4	67
7200 West Freeway / 5600 West Transit / Southern Freeway						
Dedicated Transit	409	738.5	179	83	6	54
Mixed Transit	407	740.5	179	83	6	54
7200 West Freeway / 5600 West Transit / 2100 North Freeway						
Dedicated Transit	205.5	787	127	54	0	31
Mixed Transit	203.5	789	127	54	0	31
7200 West Freeway / 5600 West Transit / Arterials						
Dedicated Transit	298.5	761	155	83	4	75
Mixed Transit	296.5	763	155	83	4	75

[a] Dedicated Transit = Dedicated Right-of-Way Transit Option; Mixed Transit = Mixed-Traffic Transit Option

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